Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

Claims 1-33 (Canceled)

34. (Currently Amended) A motion picture retrieval information generating apparatus (40) that generates retrieval information for retrieving motion picture data constituted of one or more scenes (140, 142, 144, 146, 160), comprising:

a retrieval information generating section (102, 103, 104, 105) that generates retrieval information corresponding to each of said one or more scenes on the basis of said motion picture data, and

wherein said retrieval information generating section (102, 103, 104, 105) comprises:

a first summary information generating means (103) for forming plural spatially split blocks ~~of a scene which are obtained by spatially splitting said scene and which have~~ ~~having~~ a length ~~of each~~ of said ~~scenes~~ scene in a direction of the time axis ~~obtained by~~ ~~spatially splitting said each of said scenes (140, 142, 144, 146, 160) to generate~~ and ~~for~~ ~~generating~~ summary information (188) ~~of said scene generated by calculating statistics of~~ ~~motion picture data within each~~ of ~~a~~ said spatially split blocks ~~of said scene.~~ ~~unit.~~

35. (Previously Presented) The motion picture retrieval information generating

apparatus according to claim 34, wherein:

each of said scenes (140, 142, 144, 146, 160) are obtained by dividing consecutive

motion picture data on the time axis, and

said the motion picture retrieval information generating apparatus further comprises:

a motion picture structure information outputting section (101) outputting motion picture

structure information expressing positions, in said motion picture data, of each of said scenes,

and

wherein said retrieval information generating section (102, 103, 104, 105) generates

retrieval information corresponding to each of said scenes (140, 142, 144, 146, 160) on the basis

of said motion picture structure information and said motion picture data.

36. (Previously Presented) The motion picture retrieval information generating apparatus

according to claim 34, wherein said first summary information generating means (103) spatially

splits each of said scenes (140, 142, 144, 146, 160) into a predetermined number of parts in each

of two directions defined spatially.

37. (Currently Amended) ~~The motion picture retrieval information generating apparatus~~

~~according to claim 34,~~ A motion picture retrieval information generating apparatus (40) that

generates retrieval information for retrieving motion picture data constituted of one or more

scenes (140, 142, 144, 146, 160), comprising:

a retrieval information generating section (102, 103, 104, 105) that generates retrieval

information corresponding to each of said one or more scenes on the basis of said motion picture

data, and

wherein said retrieval information generating section (102, 103, 104, 105) comprises:

a first summary information generating means (103) for forming plural spatially

split blocks having a length of each of said scenes in a direction of the time axis obtained

by spatially splitting said each of said scenes (140, 142, 144, 146, 160) to generate

summary information (188) of a spatially split block unit, and

wherein said first summary information generating means (103) splits each of said

scenes (140, 142, 144, 146, 160) into 2 to the nth power parts, n being a predetermined

number.

38. (Previously Presented) The motion picture retrieval information generating

apparatus according to claim 37, wherein said retrieval information generating section (102, 103,

104, 105) further comprises:

a second summary information generating means (102) for temporally dividing each of

said scenes (140, 142, 144, 146, 160) to form plural temporally divided blocks having a picture

size of said each of said scenes spatially and to generate summary information of a temporally

divided block unit.

39. (Previously Presented) The motion picture retrieval information generating apparatus

according to claim 38, wherein said retrieval information generating section (102, 103, 104, 105)

further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

40. (Previously Presented) The motion picture retrieval information generating

apparatus according to claim 36, wherein said retrieval information generating section (102, 103,

104, 105) further comprises:

a second summary information generating means (102) for temporally dividing each of

said scenes (140, 142, 144, 146, 160) to form plural temporally divided blocks having a picture

size of said each of said scenes spatially and to generate summary information of a temporally

divided block unit.

41. (Previously Presented) The motion picture retrieval information generating apparatus

according to claim 40, wherein said retrieval information generating section (102, 103, 104, 105)

further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

42. (Previously Presented) The motion picture retrieval information generating

apparatus (40) according to claim 34, wherein said retrieval information generating section (102,

103, 104, 105) further comprises:

a second summary information generating means (102) for temporally dividing each of

said scenes (140, 142, 144, 146, 160) to form plural temporally divided blocks having a picture

size of said each of said scenes spatially and to generate summary information of a plural

temporally divided block unit.

43. (Previously Presented) The motion picture retrieval information generating apparatus

(40) according to claim 42, wherein said retrieval information generating section (102, 103, 104,

105) further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

44. (Previously Presented) The motion picture retrieval information generating

apparatus (40) according to claim 37, wherein said retrieval information generating section (102,

103, 104, 105) further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

45. (Previously Presented) The motion picture retrieval information generating

apparatus (40) according to claim 36, wherein said retrieval information generating section (102,

103, 104, 105) further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

46. (Previously Presented) The motion picture retrieval information generating

apparatus (40) according to claim 34, wherein said retrieval information generating section (102,

103, 104, 105) further comprises:

a third summary information generating means (104) for generating summary information

of all of each of said scenes (140, 142, 144, 146, 160).

47. (Currently Amended) A motion picture retrieving apparatus (50) for retrieving a

desired picture using retrieval information corresponding to each of one or more scenes (140,

142, 144, 146, 160) constituting motion picture data, in which said motion picture data is related with said retrieval information and said retrieval information comprises summary information (188) ~~for each of said one or more scenes,~~ with plural spatially spilt blocks having a length of each of said scenes in a direction of the time axis as a unit, obtained by spatially splitting said each of said scenes (140, 142, 144, 146, 160), said motion picture retrieving apparatus comprising:

information managing means (501, 502) for reading and managing said retrieval information; ~~and~~

first scene retrieving means (504), being connected with said information managing means, and for retrieving a scene (140, 142, 144, 146, 160) meeting a first retrieval request in response to said first retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided from the outside, using said summary information ~~of a spatially split block unit~~ included in said retrieval information;

~~wherein said summary information is statistics of motion picture data within spatially split blocks of said one or more scenes, the spatially split blocks of a scene are obtained by spatially splitting said scene and have a length of said scene in a direction of the time axis.~~

48. (Previously Presented) The motion picture retrieving apparatus (50) according to claim 47, wherein:

said retrieval information further comprises summary information with plural temporally divided blocks having a picture size of each of said scenes spatially, obtained by temporally dividing said each of said scenes (140, 142, 144, 146, 160), as a unit, and

said motion picture retrieving apparatus further comprises:

second scene retrieving means (505), being connected to said information managing means (501, 502), for retrieving a scene (140, 142, 144, 146, 160) meeting a second retrieval request in response to said second retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided from the outside, using said summary information of a temporally divided block unit included in said retrieval information.

49. (Previously Presented) The motion picture retrieving apparatus (50) according to claim 48, wherein:

said retrieval information further comprises summary information with each of said scenes (140, 142, 144, 146, 160) as a unit, and

said motion picture retrieving apparatus further comprises:

third scene retrieving means (503), being connected with said information managing means (501, 502), and for retrieving a scene (140, 142, 144, 146, 160) meeting a third retrieval request in response to said third retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside, using said summary information with a scene (140, 142, 144, 146, 160) as a unit included in said retrieval information.

50. (Previously Presented) The motion picture retrieving apparatus (50) according to claim 47, wherein:

said retrieval information further comprises summary information with each of said scenes (140, 142, 144, 146, 160) as a unit, and

said motion picture retrieving apparatus further comprises:

second scene retrieving means (503), connected to said information managing means (501, 502), for retrieving a scene (140, 142, 144, 146, 160) meeting a second retrieval request in response to said second retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided from the outside, using said summary information with a scene (140, 142, 144, 146, 160) as a unit included in said retrieval information.

51. (Currently Amended) A storage medium (107) in which retrieval information for retrieving motion picture data constituted of one or more scenes (140, 142, 144, 146, 160) is stored together with correspondence information between said retrieval information and said motion picture data, and

wherein said retrieval information comprises summary information (188) for said each of said one or more scenes, the summary information being statistics of motion picture data within

spatially spilt blocks of said one or more scenes, the with plural spatially spilt blocks of a scene

are obtained by spatially splitting said scene and have having a length of each of said scene

scenes in a direction of the time axis_ as a unit, obtained by spatially splitting said each of said

scenes (140, 142, 144, 146, 160).

52. (Previously Presented) The storage medium (107) according to claim 51, wherein

said retrieval information further comprises summary information with a plurality of temporally

divided blocks having a picture size of each of said scenes spatially, obtained by temporally

dividing said each of said scenes (140, 142, 144, 146, 160), as a unit.

53. (Previously Presented) The storage medium (107) according to claim 51, wherein

said retrieval information further comprises summary information of all of each of said scenes

(140, 142, 144, 146, 160).

54. (Currently Amended) A motion picture retrieval information managing apparatus for

managing retrieval information corresponding to each of one or more scenes (140, 142, 144,

146, 160), constituting motion picture data,_wherein said motion picture data is related with said

retrieval information and said retrieval information comprises summary information (188) for

each of said one or more scenes, comprising: with a plurality of spatially split blocks having a

~~length of each of said scenes in a direction of the time axis obtained by spatially splitting said~~

~~each of said scenes (140, 142, 144, 146, 160), as a unit, and~~

~~——— wherein said motion picture retrieval information managing apparatus comprises:~~

a read-out section (501) that reads out said retrieval information; ~~and~~

a retrieval information managing section (502) that holds retrieval information read out

by said read-out section (501) and outputs said summary information ~~of a spatially split block~~

~~unit~~ included in said retrieval information in response to a first retrieval request with a scene

(140, 142, 144, 146, 160) as a retrieval unit, provided from the outside~~; and~~

~~——— wherein said summary information is statistics of motion picture data within spatially~~

~~split blocks of said one or more scenes, the spatially split blocks of a scene are obtained by~~

~~spatially splitting said scene and have a length of said scene in a direction of the time axis.~~

55. (Previously Presented) The motion picture retrieval information managing apparatus

according to claim 54, wherein:

said retrieval information further comprises summary information with plural temporally

divided blocks having a picture size of each of said scenes spatially, obtained by temporally

dividing said each of said scenes (140, 142, 144, 146, 160), as a unit, and

said retrieval information managing section (502) further outputs said summary

information of a temporally divided block unit included in said retrieval information in response

to a second retrieval request with a scene (140, 142, 144, 146, 160) as a retrieval unit, provided

from the outside.

56. (Previously Presented) The motion picture retrieval information managing apparatus

according to claim 55, wherein:

said retrieval information further comprises summary information with each of said

scenes (140, 142, 144, 146, 160) as a unit, and

said retrieval information managing section (502) further outputs said summary

information with a scene (140, 142, 144, 146, 160) as a unit included in said retrieval

information in response to a third retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside.

57. (Previously Presented) The motion picture retrieval information managing apparatus

according to claim 54, wherein:

said retrieval information further comprises summary information with each of said

scenes (140, 142, 144, 146, 160) as a unit, and

said retrieval information managing section (502) further outputs said summary

information with a scene (140, 142, 144, 146, 160) as a unit included in said retrieval

information in response to a second retrieval request with a scene (140, 142, 144, 146, 160) as a

retrieval unit, provided from the outside.

58. (New) A motion picture retrieval information generating apparatus (40) that generates retrieval information for retrieving motion picture data constituted of one or more scenes (140, 142, 144, 146, 160), comprising:

a motion picture structure information outputting section (101) for analyzing the motion picture data and outputting motion picture structure information expressing positions, in said motion picture data, of each of said one or more scenes,

a retrieval information generating section (102, 103, 104, 105) that generates retrieval information corresponding to each of said one or more scenes on the basis of said motion picture data and said motion picture structure information outputted responsive to the motion picture data and the outputted motion picture structure information, and

wherein said retrieval information generating section (102, 103, 104, 105) comprises:

a first summary information generating means (103), being responsive to the motion picture data and the outputted motion picture structure information, for forming a plurality of spatially split blocks, each of the plurality of spatially split blocks having a temporal length of each of said scenes in a direction of the time axis, the plurality of spatially split blocks being obtained by spatially splitting said each of said scenes (140, 142, 144, 146, 160) and for generating summary information (188) for each of the plurality of spatially split blocks.

59. (New) The motion picture retrieval information generating apparatus according to claim 58, wherein:

each of said scenes (140, 142, 144, 146, 160) are obtained by dividing consecutive motion picture data on a time axis, and

wherein said retrieval information generating section (102, 103, 104, 105) generates retrieval information corresponding to each of said scenes (140, 142, 144, 146, 160).

60. (New) The motion picture retrieval information generating apparatus according to claim 58, wherein said first summary information generating means (103) spatially splits each of said scenes (140, 142, 144, 146, 160) into a predetermined number of parts in each of two directions defined spatially and so that each of the predetermined number of parts has a length along the direction of the time axis of each of said scenes.

61. (New) The motion picture retrieval information generating apparatus according to claim 58, wherein the summary information being generated by said first summary information generating means (103) for each of the plurality of spatially split blocks comprises frequency information and average information.

62. (New) The motion picture retrieval generating apparatus of any of claims 34, 37 or 58, wherein the length each of the plural spatially split blocks is equivalent temporally to the temporal length of said each of said one or more scenes.

63. (New) The motion picture retrieval generating apparatus of any of claims 34, 37 or 58, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the information of at least a plurality of the corresponding spatial split blocks of the plurality or more frames making up said each scene.

64. (New) The motion picture retrieval generating apparatus of any of claims 34, 37 or 58, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the information of all of the corresponding spatial split blocks of the plurality or more frames making up said each scene.

65. (New) The motion picture retrieving apparatus of claim 47, wherein the length each of the plural spatially split blocks is equivalent temporally to the temporal length of said each of said one or more scenes.

66. (New) The motion picture retrieving apparatus of claim 47, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the information of at least a plurality of the corresponding spatial split blocks of the plurality or more frames making up said each scene.

67. (New) The motion picture retrieving apparatus of claim 47, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the information of all of the corresponding spatial split blocks of the plurality or more frames making up said each scene.

68. (New) The motion picture retrieval information managing apparatus of claim 54, wherein the length each of the plural spatially split blocks is equivalent temporally to the temporal length of said each of said one or more scenes.

69. (New) The motion picture retrieval information managing apparatus of claim 54, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the information of at least a plurality of the corresponding spatial split blocks of the plurality or more frames making up said each scene.

70. (New) The motion picture retrieval information managing apparatus of claim 54, wherein:

each of said one or more scenes is composed of a plurality or more of frames,

each of said plurality of frames is spatially split in a fashion corresponding to the spatial

splitting of said each scene, and

the summary information for each spatially split block of said each scene represents the

information of all of the corresponding spatial split blocks of the plurality or more frames making

up said each scene.

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